

## CLAIMS

1. A method of producing a production run schedule of bakery products, the method including the steps of:

5 determining bakery products to be produced including a dough type, a weight of dough of each said bakery product and a number of said bakery products to be produced;

organising each bakery product into a group according to the dough type;

calculating a total weight of dough of each bakery product to be produced;

10 calculating a number of full batches that can be produced of each bakery product;

calculating a weight of dough for each bakery product that cannot be produced in a batch comprising a whole number of bags of flour; and

15 combining the respective weights of dough for bakery products of the same dough type that cannot be produced in a batch comprising a whole number of bags of flour into such a batch.

2. A method according to claim 1, wherein the combined batches are full batches.

3. A method according to claim 1 or 2, wherein the schedule is amendable to ensure each batch in the schedule includes a whole number of bags of flour.

20 4. A method according to claim 3, wherein the number of bakery products is amendable to obtain full batches in the schedule.

5. A method according to claim 2, wherein the sequence of batches in the schedule is amendable.

6. A method according to any one of the preceding claims, wherein the bakery products of the same dough type are arranged in consecutive batches.
7. A method according to any one of the preceding claims, wherein the number of bakery products is multiplied by a weight of dough required to form a single bakery product, thereby to calculate the total weight of dough for the bakery product.
8. A method according to claim 7, wherein the method further includes displaying the batches, via a computer to permit subsequent amendment.
9. A method according to claim 8, wherein the step of displaying the batches involves displaying the batches graphically.
10. A method according to claim 9, wherein the graphical display of batches includes graphical identification of bakery products forming the displayed batch.
11. A method according to any one of the preceding claims, wherein the method includes the further step of providing a schematic layout of dough pieces on baking trays or in containers, prior to proving or baking.
12. A computer program for scheduling a production run of determined bakery products in predetermined quantities, the program being capable of performing the steps of:
  - organising each bakery product into a group according to the dough type;
  - calculating a total weight of dough of each bakery product to be produced;
  - calculating a number of full batches that can be produced of each bakery product;
  - calculating a weight of dough for each bakery product that cannot be produced in a batch comprising a whole number of bags of flour; and

combining the respective weights of dough for bakery products of the same dough type that cannot be produced in a batch comprising a whole number of bags of flour into such a batch.

13. A computer program according to claim 12, wherein the combined batches  
5 are full batches.

14. A computer program according to claim 12 or 13, wherein the program performs the further step of displaying the batches to permit subsequent amendments of the schedule.

15. A computer program according to claim 14, wherein the batches are  
10 displayed graphically.

16. A computer program according to claim 15, wherein the graphical display of batches includes graphical identification of bakery products forming the displayed batch.

17. A computer program according to claim 16, wherein the program provides a  
15 schematic layout of dough pieces on baking trays or in containers, prior to proving or baking.

18. A baking system including:

a computer with memory; and

a computer program according to any of claims 11 to 16.

20 19. A baking system according to claim 18, wherein the system includes baking machinery linked to the computer for control thereby.

20. A baking system according to claim 19, wherein the baking machinery provide feedback to the program, the feed back comprising any one or more of the following:

- a) ingredients mixing and loading times expressed as a machine efficiency;
- b) individual batch mixing times;
- c) total mixing time;
- 5 d) total lead time;
- e) total time to produce a production run;
- f) failed production; and
- g) amendments made to the production run.

21. A computer program for scheduling a production run of determined bakery  
10 products in predetermined quantities, the computer program being in a computer readable form and being capable of performing the steps of:

- organising each bakery product into a group according to the dough type;
- calculating a total weight of dough of each bakery product to be produced;
- calculating a number of full batches that can be produced of each bakery  
15 product;
- calculating a weight of dough for each bakery product that cannot be produced in a batch comprising a whole number of bags of flour; and
- combining the respective weights of dough for bakery products of the same dough type that cannot be produced in a batch comprising a whole number of  
20 bags of flour into such a batch.

22. A computer program according to claim 21, wherein the combined batches are full.

23. A computer program according to claim 21 or 22, wherein the program  
5 performs the further step of displaying the batches to permit subsequent amendments of the schedule.

24. A computer program according to claim 23, wherein the batches are displayed graphically.

25. A computer program according to claim 24, wherein the graphical display of  
10 batches includes graphical identification of bakery products forming the displayed batch.

26. A computer program according to claim 25, wherein the program provides a schematic layout of dough pieces on baking trays or in containers, prior to proving or baking.

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